Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL QUALITY MEASURES CLEARINGHOUSE

General

Title

Stable coronary artery disease: percentage of patients with a diagnosis of stable coronary artery disease and hypertension who are prescribed an ACE inhibitor or ARB.

Source(s)

Goblirsch G, Bershow S, Cummings K, Hayes R, Kokoszka M, Lu Y, Sanders D, Zarling K. Stable coronary artery disease. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2013 May. 71 p. [98 references]

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients age 18 years and older with a diagnosis of stable coronary artery disease and hypertension who are prescribed an angiotensin-converting enzyme (ACE) inhibitor or angiotensin II receptor blocker (ARB).

Rationale

The priority aim addressed by this measure is to increase the use of angiotensin-converting enzyme (ACE) inhibitors or angiotensin II receptor blockers (ARBs) in patients with stable coronary artery disease with systolic congestive heart failure (CHF) (ejection fraction less than or equal to 40%), including those patients with a comorbidity diagnosis of chronic kidney disease and/or diabetes mellitus.

Among patients with stable angina, ACE inhibitors are most beneficial to patients with left ventricular dysfunction post-myocardial infarction, persistent hypertension and diabetes. Patients with normal left

ventricular function who also have hypertension, type II diabetes mellitus or chronic kidney disease should be on ACE inhibitors. If the patient cannot tolerate ACE inhibitors, a potential substitute would be ARBs.

A meta-analysis of five placebo randomized controlled trials involving different ACE inhibitors showed reduction in all-cause and cardiovascular mortality, as well as myocardial infarction, that were statistically significant. The degree of benefit needs to be assessed individually and may depend on patient characteristics.

Evidence for Rationale

Danchin N, Cucherat M, Thuillez C, Durand E, Kadri Z, Steg PG. Angiotensin-converting enzyme inhibitors in patients with coronary artery disease and absence of heart failure or left ventricular systolic dysfunction: an overview of long-term randomized controlled trials. Arch Intern Med. 2006 Apr 10;166(7):787-96. PubMed

Fox KM. Efficacy of perindopril in reduction of cardiovascular events among patients with stable coronary artery disease: randomised, double-blind, placebo-controlled, multicentre trial (the EUROPA study). Lancet. 2003 Sep 6;362(9386):782-8. PubMed

Goblirsch G, Bershow S, Cummings K, Hayes R, Kokoszka M, Lu Y, Sanders D, Zarling K. Stable coronary artery disease. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2013 May. 71 p. [98 references]

Mann JF, Schmieder RE, McQueen M, Dyal L, Schumacher H, Pogue J, Wang X, Maggioni A, Budaj A, Chaithiraphan S, Dickstein K, Keltai M, MetsÃ¤rinne K, Oto A, Parkhomenko A, Piegas LS, Svendsen TL, Teo KK, Yusuf S, ONTARGET investigators. Renal outcomes with telmisartan, ramipril, or both, in people at high vascular risk (the ONTARGET study): a multicentre, randomised, double-blind, controlled trial. Lancet. 2008 Aug 16;372(9638):547-53. PubMed

Yusuf S, Sleight P, Pogue J, Bosch J, Davies R, Dagenais G. Effects of an angiotensin-converting-enzyme inhibitor, ramipril, on cardiovascular events in high-risk patients. The Heart Outcomes Prevention Evaluation Study Investigators. N Engl J Med. 2000 Jan 20;342(3):145-53. PubMed

Primary Health Components

Stable coronary artery disease; hypertension; angiotensin-converting enzyme (ACE) inhibitor; angiotensin II receptor blocker (ARB)

Denominator Description

Number of stable coronary artery disease patients and hypertension (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Number of patients who had a prescription for an angiotensin-converting enzyme (ACE) inhibitor or angiotensin II receptor blocker (ARB)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Unspecified

National Guideline Clearinghouse Link

Stable coronary artery disease.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Clinical Practice or Public Health Sites

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

The time frame pertaining to data collection is annually.

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions
Number of stable coronary artery disease patients and hypertension

Population Definition: All patients age 18 years and older with stable coronary artery disease diagnosis and hypertension.

Exclusions
Unspecified

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions
Number of stable coronary artery disease patients who had a prescription for an angiotensin-converting enzyme (ACE) inhibitor or angiotensin II receptor blocker (ARB)

Exclusions
Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Percentage of patients with a diagnosis of stable coronary artery disease and hypertension who are prescribed an ACE inhibitor or ARB.

Measure Collection Name

Stable Coronary Artery Disease

Submitter

Institute for Clinical Systems Improvement - Nonprofit Organization

Developer

Institute for Clinical Systems Improvement - Nonprofit Organization

Funding Source(s)

The Institute for Clinical Systems Improvement's (ICSI's) work is funded by the annual dues of the member medical groups and five sponsoring health plans in Minnesota and Wisconsin.

Composition of the Group that Developed the Measure

Work Group Members: Greg Goblirsch, MD (*Work Group Leader*) (River Falls Clinic) (Family Medicine); Spencer Bershow, MD (Fairview Health Services) (Family Medicine); Yun Lu, PharmD, MS (Hennepin County Medical Center) (Pharmacy); Kathy Zarling, RN, MS, CNS (Mayo Clinic) (Nursing); Marek Kokoszka, MD (Park Nicollet Health Services) (Cardiology); Debra M. Sanders, RD (River Falls Medical Clinic) (Dietetics); Kathy Cummings, RN, BSN, MA (Institute for Clinical Systems Improvement [ICSI]) (Project Manager); Rochelle Hayes, BS (ICSI) (Systems Improvement Coordinator)

Financial Disclosures/Other Potential Conflicts of Interest

The Institute for Clinical Systems Improvement (ICSI) has long had a policy of transparency in declaring potential conflicting and competing interests of all individuals who participate in the development, revision and approval of ICSI guidelines and protocols.

In 2010, the ICSI Conflict of Interest Review Committee was established by the Board of Directors to review all disclosures and make recommendations to the board when steps should be taken to mitigate potential conflicts of interest, including recommendations regarding removal of work group members. This committee has adopted the Institute of Medicine Conflict of Interest standards as outlined in the report Clinical Practice Guidelines We Can Trust (2011).

Where there are work group members with identified potential conflicts, these are disclosed and discussed at the initial work group meeting. These members are expected to recuse themselves from related discussions or authorship of related recommendations, as directed by the Conflict of Interest committee or requested by the work group.

The complete ICSI policy regarding Conflicts of Interest is available at the ICSI Web site .

Disclosure of Potential Conflicts of Interest

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National, Regional, Local Committee Affiliations: None
Guideline Related Activities: None
Research Grants: None
Financial/Non-Financial Conflicts of Interest: None

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Guideline Related Activities: None
Research Grants: None
Financial/Non-Financial Conflicts of Interest: None

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Guideline Related Activities: Acute Coronary Artery Disease (ICSI)
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Financial/Non-Financial Conflicts of Interest: None

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Guideline Related Activities: None
Research Grants: None
Financial/Non-Financial Conflicts of Interest: None

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2013 May

Measure Maintenance

Scientific documents are revised every 12 to 24 months as indicated by changes in clinical practice and literature.

Date of Next Anticipated Revision

The next scheduled revision will occur within 24 months.

Measure Status

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Stable coronary artery disease. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2011 Apr. 58 p.

The measure developer reaffirmed the currency of this measure in January 2016.

Measure Availability

Source available for purchase from the Institute for Clinical Systems Improvement (ICSI) Web site. Also available to ICSI members for free at the ICSI Web site and to Minnesota health care organizations free by request at the ICSI Web site.

For more information, contact ICSI at 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; Phone: 952-814-7060; Fax: 952-858-9675; Web site: www.icsi.org; E-mail: icsi.info@icsi.org.

NQMC Status

This NQMC summary was completed by ECRI Institute on October 29, 2012.

This NQMC summary was updated by ECRI Institute on January 20, 2014.

The information was reaffirmed by the measure developer on January 13, 2016.

Copyright Statement

Production

Source(s)

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